III.—*On the Operculum of the Genus* Diplommatina.

By Dr. J. E. Gray, F.R.S., V.P.Z.S. &c.

To the Editors of the Annals of Natural History.

Gentlemen,

If Mr. Benson, before writing his observations on this genus which appeared in the preceding Number of the 'Annals' (vol. xi. p. 433), had taken the trouble to come and examine the specimens of *Diplommatina* in the British Museum on which Dr. Pfeiffer and I had founded our observations, he would have found that there was not the slightest ground for any of the arguments which he has used to induce naturalists to believe that the opercula described as belonging to the genus could have been accidentally placed in the shell, and thus excuse the imperfection which occurs in his and Capt. Hutton's description of the animal; and further, he could never have made the extraordinary suggestion that the opercula belonging to *Diplommatina* "were adventitious," and might be "assignable to the young *Alycæus strangulatus*," for the opercula of the two genera are most unlike in structure and colour, and that of the latter genus is at least five times as large as the largest species of the former.

The opercula of the three species of *Diplommatina costulata* in the Museum are each attached to the dry remains of the animal; two of the animals are still in the shell, and the third was extracted from the shell for the purpose of more accurate examination.

It is easy to understand, when we consider the minuteness of the operculum, its small size compared with that of the mouth of the shell, and its transparency, how it may be overlooked, especially when it is sought for in the curious manner mentioned by Capt. Hutton. I have a strong suspicion that if Mr. Benson's specimens were more carefully examined, the operculum would be discovered, unless the animal has been eaten out of the shell by insects.

The operculum of *Acme fusca*, so common in many parts of England, which is of about the same size but darker, was overlooked by many malacologists, and has been denied after it was described by others, as is the case with that of *Diplommatina*.

I may observe, merely to try to clear away certain theories which continue to cling about malacology, that I cannot consider "the existence of the tooth-like plait on the *columella*" of any force as "militating against the theory of an operculum" in this genus, for we now well know that *Pyramidella*, *Odostomia* and

Actæon, and sundry other genera which have tooth-like plaits on the columella, have opercula.

Secondly, Mr. Benson must excuse me if I suspect he has mistaken some adventitious membrane for an epiphragm, for I have never seen a true epiphragm which extended "even over the reflected portion on the parietes" of the mouth; indeed such an extension is inconsistent with the manner in which the part is deposited.

June 1, 1853.

IV.—*Description of a new species of Rhododendron from Bootan, in India.* By Thomas Nuttall, Esq.

Rhododendron Kendrickii.

Frutex ramosus; foliis oblongo-lanceolatis, acuminatis, glabris, concoloribus, margine leviter undulatis, junioribus pubescentibus; corymbis multifloris; laciniis calycinis minutis, acuminatis; (staminibus 10?) filamentis glabris; capsulis arcuatis, glabris, 6-locularibus; seminibus lanceolatis, utrinque acutis.

Hab. Mountains of Bootan (Mr. Booth). About 7000 feet elevation, accompanying *R. Edgworthii*, and found lower down than *R. Hookeri* and *R. Falconeri*, but above *R. serotinum*.

This fine species, having some affinity with *R. arboreum*, forms lofty thickets (after the manner of *R. ponticum*), through which the traveller finds dark and difficult paths. The stem attains the diameter of 7 or 8 inches, with a smooth pale bark. The leaves, 4 to 6 inches long, are scarcely more than an inch wide, elegantly waved on the margin in small plaits, so as to appear almost crenate, disposed partly in whorls, equally green and smooth on both surfaces when adult, the petiole less than half an inch in length; the young leaves and stems, in young plants, more or less clothed with reddish glutinous hairs; beneath, shining, with the pubescence chiefly confined to the midrib. Flower-cone oval, the scales smooth, rounded and obtuse; innermost scales or bracts silky. Corymb 10- to 12-flowered. Flowers large, deep red. Stamens 10? smooth. Stigma 5-lobed. Calyx small, as in *R. arboreum*, the segments broad, ovate, acuminate. Capsule 1 to $1\frac{1}{4}$ inch long, incurved, 6-celled, smooth and dark brown. Seeds small, darkish brown, lanceolate, oblique, acute at both extremities.

It grows promiscuously with the very hardy *Pinus excelsa*, and with several kinds of undescribed oaks. Found to be hardy in the climate of England. Fresh flowers have not yet been seen,